

RF Active Compositions for Use in Adhesion, Bonding and Coating

Abstract

A susceptor composition that can bond two or more layers or
5 substrates to one another and that can be used to coat or cut a substrate. The
susceptor composition is activated in the presence of radio frequency (RF)
energy. In one embodiment, the susceptor composition of the present
invention comprises a susceptor and a carrier. The carrier and susceptor are
blended with one another and form a mixture, preferably a uniform mixture.
10 The susceptor is present in an amount effective to allow the susceptor
composition to be heated by RF energy. In a preferred embodiment, the
susceptor also functions as an adhesive. The susceptor is an ionic or polar
compound and acts as either a charge-carrying or an oscillating/vibrating
component of the susceptor composition. The susceptor generates thermal
15 energy in the presence of an RF electromagnetic or electrical field (hereafter RF
field).